DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-010475 Address: 333 Burma Road **Date Inspected:** 01-Dec-2009

City: Oakland, CA 94607

OSM Arrival Time: 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island Contractor: **Location:** Shanghai, China

CWI Name: CWI Present: Yes No NA **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No **Weld Procedures Followed:** Yes No N/A Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

Boat Dock

ZPMC issued "Inspection Notification Sheet" number 11302009-3 informing QA that at 1700 hours ABF Inspectors will be performing magnetic particle (MT) and ultrasonic (UT) inspections of the following OBG segment welds repairs: CA008-002, CA008-004, CA008-006, CA012-002, CA012-004 and CA012-006. These welds are on OBG segment 4E WP E2 deck plate to edge plate on the bikepath side. At around 1930 hours this QA Inspector arrived at OBG segment 4E and observed ABF appears to have completed MT and UT inspections of the weld repairs. This QA Inspector performed random visual, magnetic particle and ultrasonic for detection of longitudinal and planar transverse indications utilizing scanning pattern A, B, C and D (AWS D1.5 Fig 6.7) inspections of the weld repair locations and items observed on this date appeared to generally comply with applicable contract documents.

ZPMC issued "Inspection Notification Sheet" number 12012009-5 item 1 informing QA that ABF Inspectors will be performing magnetic particle (MT) inspections of OBG segment weld OBE3A-003 repair locations between OBG segment 3AE and 3BE bottom plates. This QA Inspector observed ABF appears to have wire brushed the surfaces where they intend to perform magnetic inspections of the weld repairs. This QA Inspector witnessed

WELDING INSPECTION REPORT

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ABF Inspector Mr. Guo Qi Ming performing MT inspections of each of the repair areas and items observed on this date appeared to generally comply with applicable contract documents.

ZPMC issued "Inspection Notification Sheet" number 12012009-5 item 2 informing QA that ABF Inspectors will be performing magnetic particle (MT) inspections of OBG segment weld CA010-002, CA010-004, CA010-006, CA020-035 and CA020-037 repair locations deck plate to edge plate welds on OBG segment 4E WP E5 Crossbeam Side at 1930 hours. ABF Inspectors informed this QA Inspector that they do not have a copy of the UT rejection report and since they do not know where the weld repair locations are located, ABF dayshift personnel will MT this weld tomorrow morning.

ZPMC informed this QA Inspector that ABF Inspectors will be performing magnetic particle (MT) inspections of OBG segment weld OBE4AW side plate butt weld on the cross beam side of OBG segment 4W. This QA Inspector asked ABF MT Inspector Mr. Guo Qi Ming if a "Verification Witness Request" has been issued to document this inspection and he informed this QA Inspector that he does not know if an inspection request has been issued for this work. This QA Inspector witnessed ABF Inspector Mr. Guo Qi Ming performing MT inspections of several of the weld repair areas and he identified linear indications at locations 3580 mm and 3610 mm from the bottom of this weld and the other weld repair locations were marked by ABF Inspectors as being acceptable. This QA Inspector performed random MT inspections of several of the weld repair areas and except for the two previously identified linear indications, items observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

See Above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer